Norming Study Results

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1 Experimental Design

In order to experiment how people react to irony, we ran a norming study in order to find out what people's attitudes are toward a specific situation. I ran a survey where $n = 320$ investigating what people thought about how many apples one should bring on a camping trip. Survey-takers were given the following context:

> You and a friend are planning to go on a weekend camping trip. Your friend goes to the store to buy things for the trip and decides to buy x where $x \in 2, 3, 4, 5, 10, 20$ apples.

In order to mimic the survey-taker who is aware of what other people are thinking about their reasoning(or the prior over pretense), we asked the them to answer the following:

> You and a group of other people are taking this survey. Your goal is to select the option that the majority of the group will select. From below, please choose the option that you believe the majority of survey takers will choose:
>
> 1. x apples is too many apples to bring on a camping trip.
> 2. x apples is too few apples to bring on a camping trip.

Participants were then asked to rate how confident they were in their answers on a scale from (1-7)

Link to survey can be found here: `https://jsoddano.github.io/irony-experiments/experiments/0_apple-ratings/`

2 Results

2.1 Apples v Sentiment

First, I plotted number of apples vs many/few sentiment. The graph shows that **as the number of apples increased, the more people believed that there were too many apples**. There is a clear positive correlation between

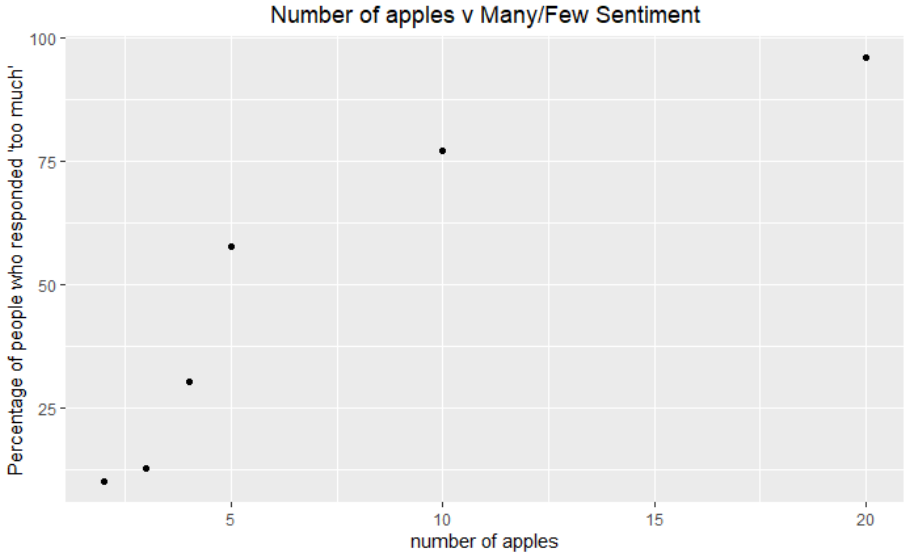

Figure 1: Number of Apples v Many/Few Sentiment

increasing the number of apples and participants believing that there are too many apples (as to be expected).

2.2 Apples v Confidence Rating

This graph is sort of parabolic in nature with its inflection point at approximately 3 apples. This was the point where participants had the lowest confidence in their ratings. People seemed most confident in their answers when presented with scenarios with less or more number of apples. This could possibly be the point where irony can be expressed most strongly.

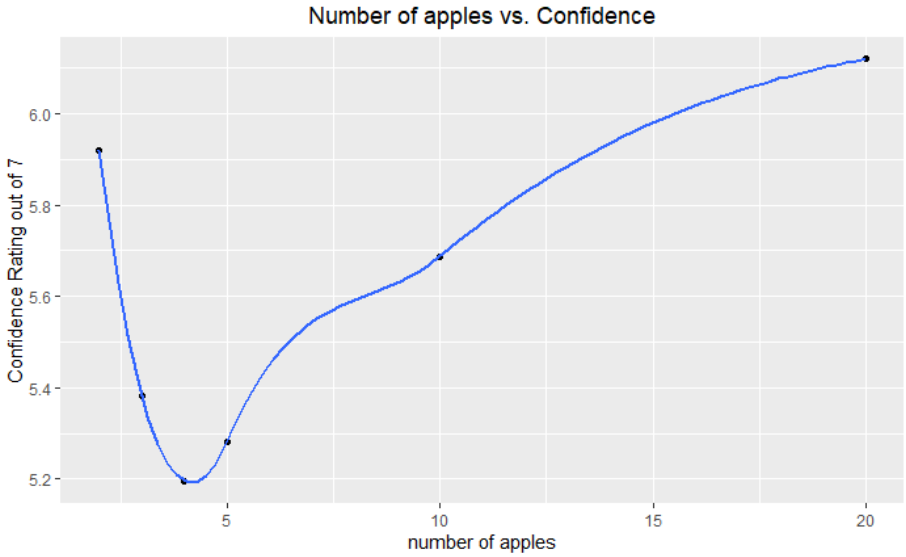

Figure 2: Number of Apples v Confidence Rating

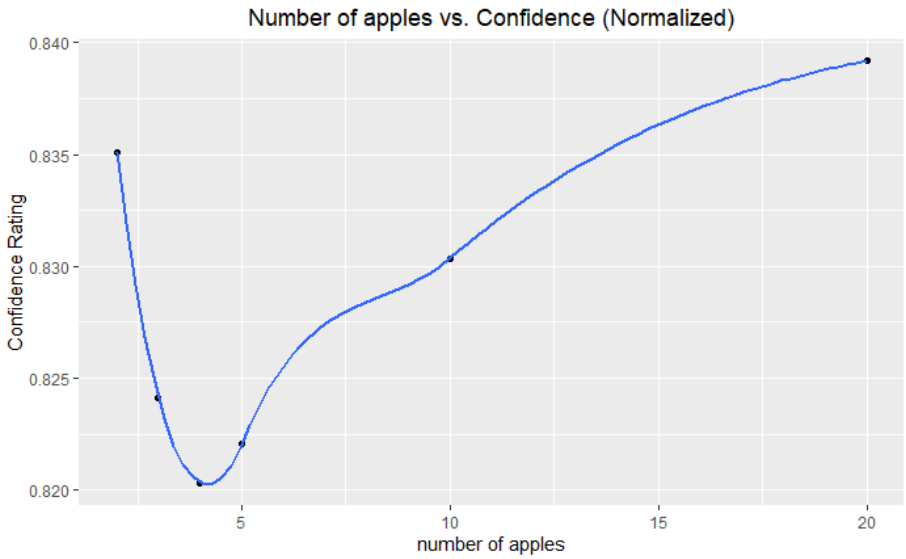

Figure 3: normalized version of the same graph whose confidence scale is based on the range: [0.5,1] instead of [0,7]:

This graph shows that people that made the selection that there were too many apples were less confident in their decision that people that made the selection that there were too few.

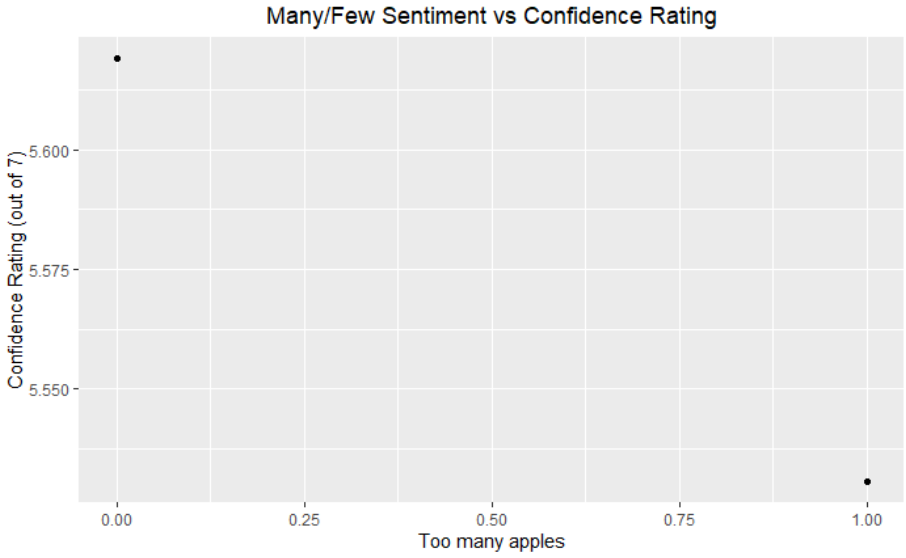

Figure 4: Confidence in Sentiment

See repository for materials: `https://github.com/jsoddano/irony-experiments/tree/master/Norming%20Analysis`